

Enterprise *AIRSpeed*

**Achieve
the
Mission**

**Decrease
Inventory**

**Decrease
Operating
Expenses**

**Enterprise
*AIRSpeed***

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Why AIRSpeed?

Enterprise AIRSpeed

AIRCRAFT

PRESIDENT'S BUDGET (PB)	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
PB98	71	125	144	150	164								
PB99	71	119	143	154	164								
PB00	74	105	140	163	183	187	201						
PB01	73	116	128	130	173	177							
PB02	73	115	124	88	92	115	119	143	155				
PB03		115	124	90	83	85	105	147	193				
PB04			124	91	99	104	104	134	192	255	303		
PB05				92	98	107	118	136	186	240			
PB06						105	110	128	173	200	249	259	254

THE INSPIRATION

Fiscal reality:

There's never enough money in the POM to satisfy requirements for both acquisition and readiness at the same time.

Behavior: Trade off future procurements to pay for readiness today

Enterprise Naval Aviation Enterprise

AIRSpeed AIRSpeed

Depot AIRSpeed

(Lean, Six Sigma, TOC)

- *Depot production processes*
- *Led by COs/AIR-6.0*
- *Rollout to 3 sites*

Enterprise AIRSpeed

(Lean, Six Sigma, TOC)

- *Fleet-Wide Repair Sites & Processes*
- *Led by O-6 ESC*
- *O-I-D + Supply Chain*
- *Links to NAVRIIP*
- *AIR-6.7.2.1 Coord Office*

NAVAIR AIRSpeed

(Lean, Six Sigma, TOC)

- *Corporate/Competency Processes and Other Productivity Initiatives*
- *Enabled by Core Team*
- *Links with Enterprise & Depot AIRSpeed*

NAVICP AIRSpeed

(Lean, Six Sigma, TOC)

- *Corporate/Competency Processes and Other Productivity Initiatives*
- *Led by NAVSUP Guidance*
- *Enabled by Deployment Team*
- *Links with Enterprise &*

**All AIRSpeed Elements Combined
Under a Single Reporting Umbrella**

**BOD NAE-wide Visibility on all
AIRSpeed Activities... Ensure all
Activity is Properly Prioritized and
Coordinated**

**Develop Metrics to Quantify
AIRSpeed Savings... Enable Portfolio**

Today's Readiness Challenge

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- CNO directed the Fleet Response Plan (**FRP**) to support the Global War on Terror (GWOT)
- Requirements **growth** in the Flying Hour Program (FHP)
- Naval Aviation will have to support current levels of readiness despite a **budget shortfall**
- Downsizing the active forces by **70k**
- Navy and Marine Corps unit commanders will fight in a cost-wise readiness environment

July 2003

Cost-Wise Readiness Became the



***“AIRSpeed* is NAVRIIP’s Enabler
for operationalizing cost-wise
readiness across the Naval Aviation
Enterprise.”**

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To enable effective and efficient preparation of Cost-Wise RFT aircraft in support of FRP.

- **Enable** – using AIRSpeed tools in order to be....
- **Effective** - at meeting RFT/M rating requirements.
- **Efficient** - at iteratively reducing costs
- **Preparation** – repair & replenishment of equipment

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- **Enterprise Approach**

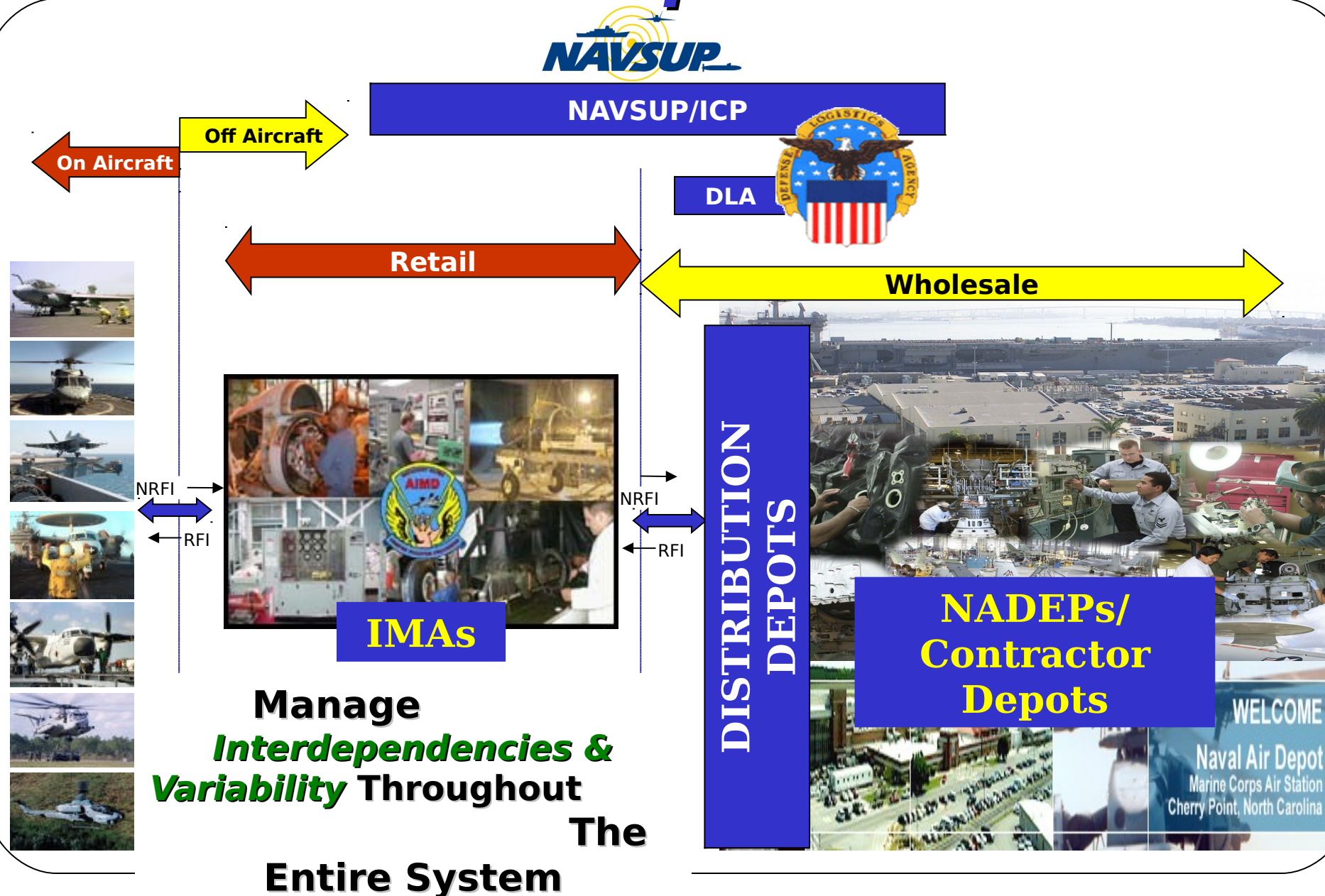
- Creates a continuous process improvement environment
- Aligns and optimizes Maintenance and Supply activities to end-user demand (Operations)
- Leverages existing initiatives
- **Utilizes TRR* to size & position inventories**

- **Cultural Change**

- Synergizes a set of industry tools
- Eliminates sub-optimization
- Local decisions made with Global impact known

- **Creates a “pull” system**

The Scope of Enterprise AIRSpeed



Fundamentals of AIRSpeed

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- Properly Manage RFT (mission)
- Manage and Reduce
 - Inventory/Investment
 - parts, equipment and facilities, APN
 - Reduce Operating Expenses
 - O&M,N, MPN
 - Variability
- Identify and manage constraints
- Identify and address interdependencies
- Create a Culture of Continuous Process Improvement (CPI)

Local decisions must be aligned to the global impact

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- **Theory of Constraints (TOC)** is based on the belief that any organization has at least one constraint and that any improvements on non-constraints may not yield as significant ROI as working on the constraint
- **LEAN** focuses on the removal of waste-defined as anything not necessary (no value added) to produce the product or service
- **Six Sigma** is based on the assumption that the outcome of the entire process will be improved by reducing the variation of multiple elements

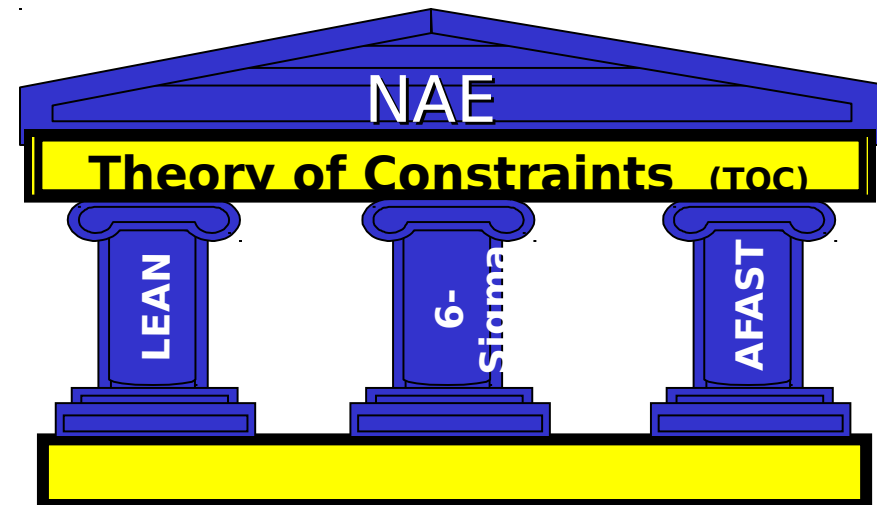
The Approach

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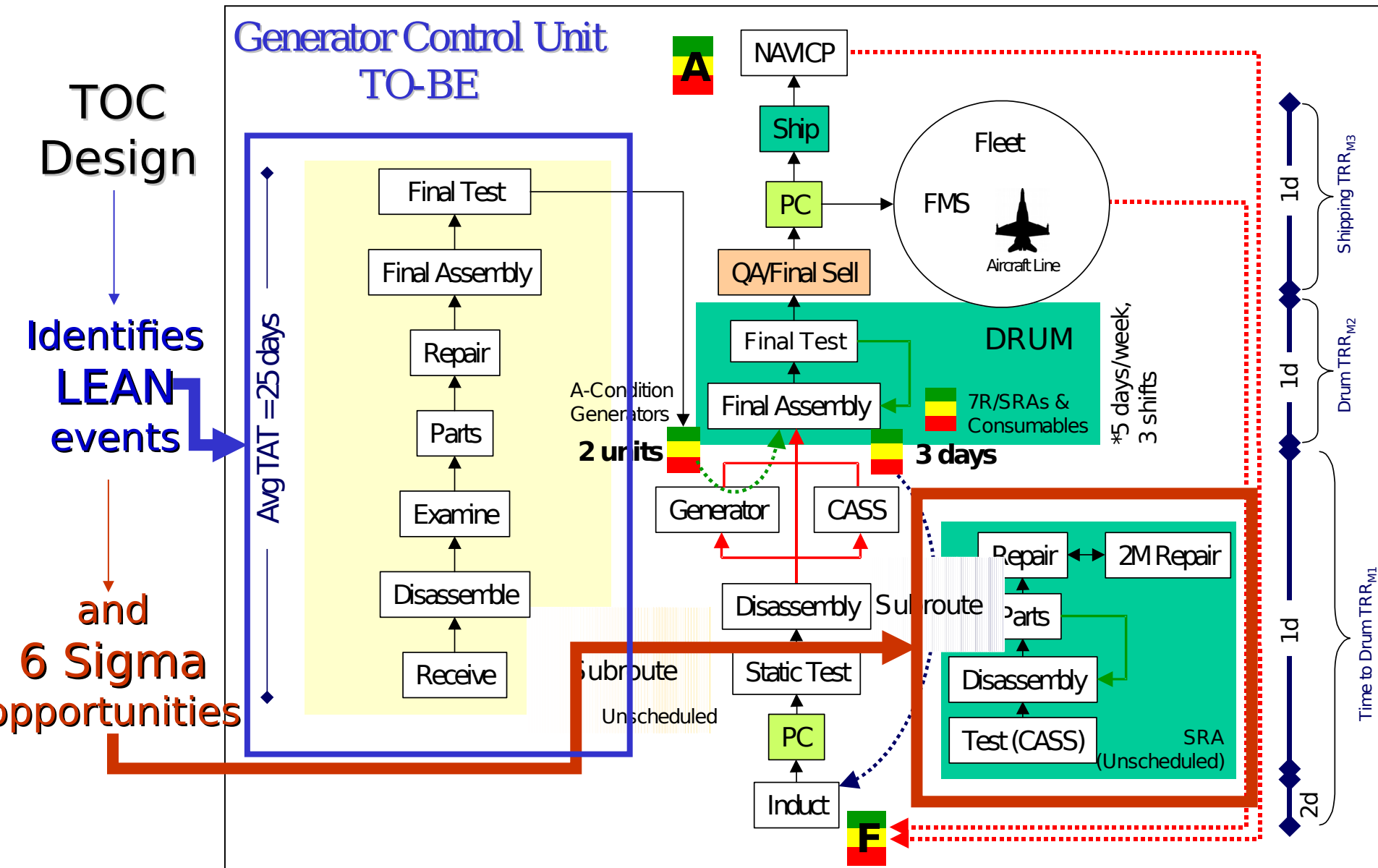
- Utilizing an integrated blend of TOC, Lean & Six Sigma
- Train the Trainers – gives the NAE “Internal Consultants”
 - Program Core Teams consist of Active Duty & Civilian Personnel (Internal Consultants)
- TMS Approach



Enterprise

AIRSpeed

An Integrated Approach



Enterprise

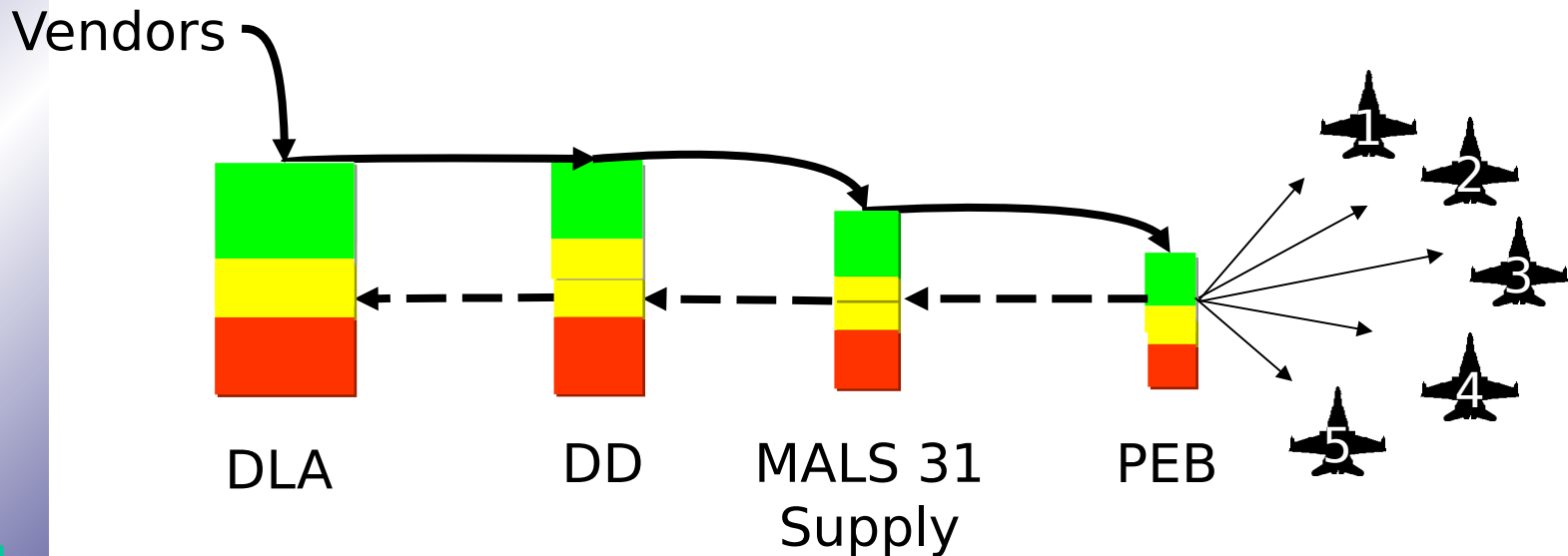
AIR^{Speed}

Transform from a “Push” to a “Pull” System (Consumables)

Achieve the Mission

Decrease Inventory

Decrease Operating Expenses



Trading high levels of inventory, investments and costs for speed and responsiveness of the enterprise.

Enterprise

AIRSpeed

Three Phases of Enterprise AIRSpeed

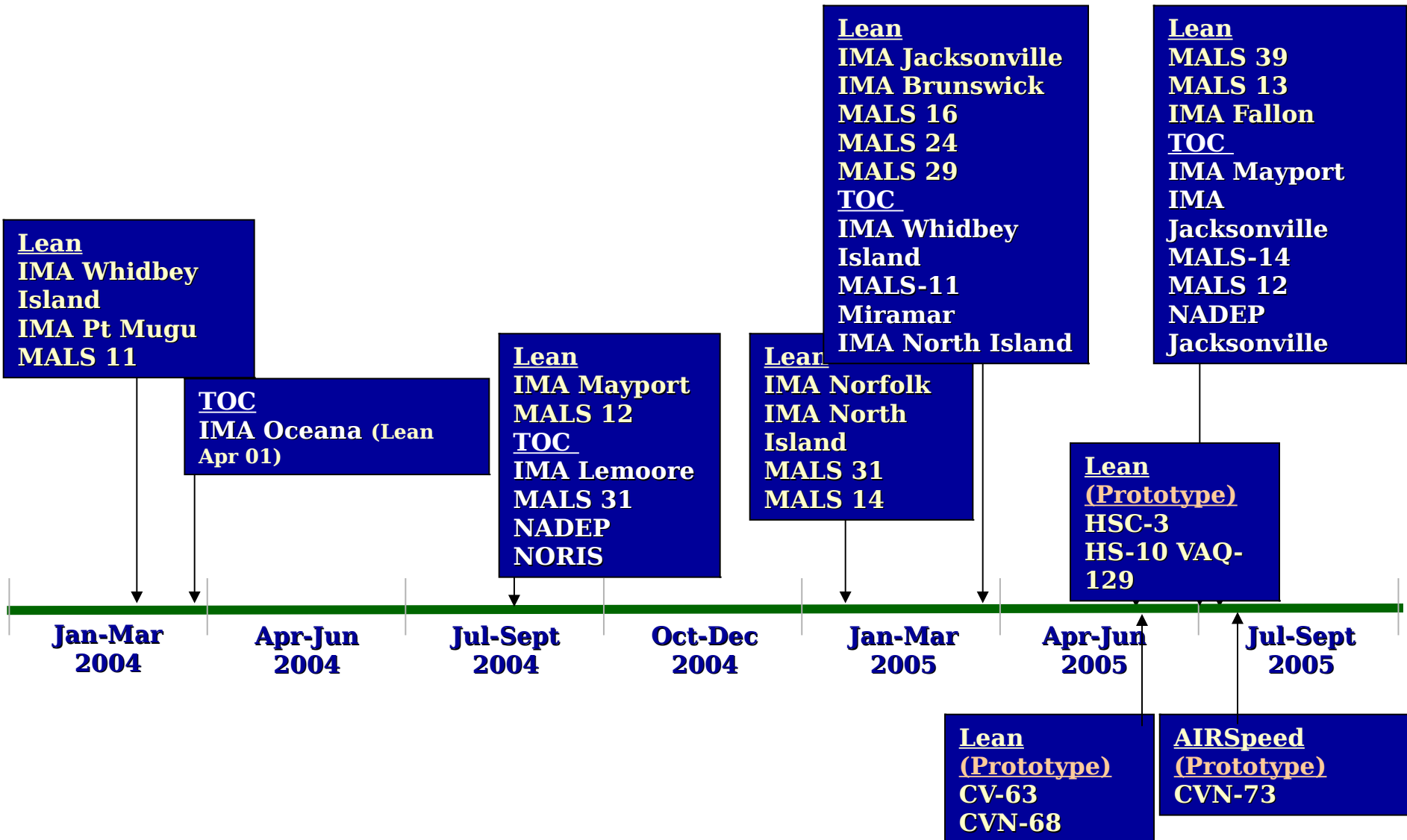
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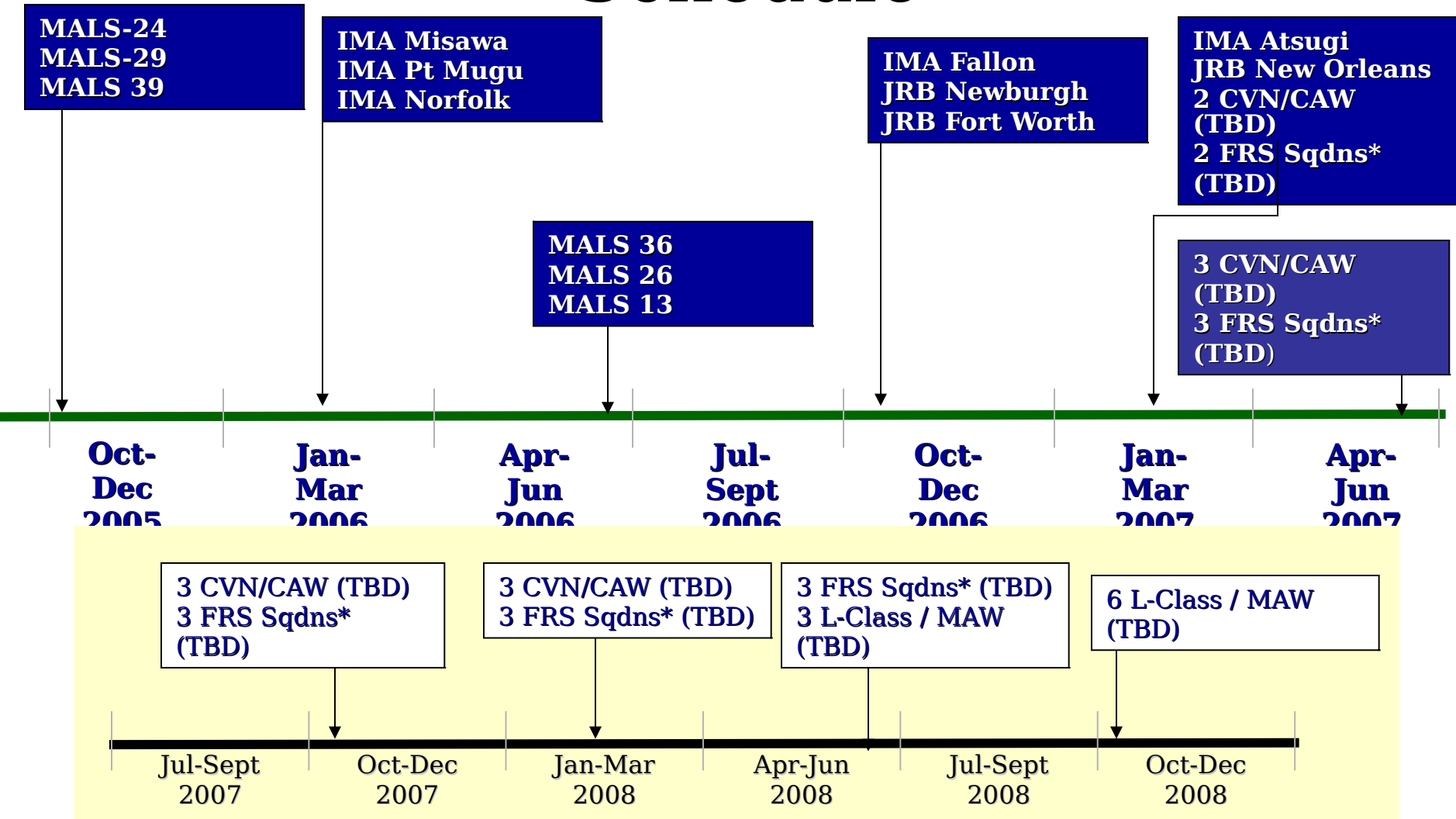
**Decrease
Operating
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- **Design**
 - 7 Weeks per site
 - Baseline the “As-Is” state
 - Design the “To-Be” state
- **Deployment**
 - Put in place resources to support “to-be”
 - Go live with the “to-be” state
 - 12-18 Months to encompass the entire activity
- **Sustainment (on-going)**
 - Establish a Center of Excellence
 - Incorporate “AIRSpeed” into Policy
 - **NAMP, P485, OPNAV5442**
 - AIRSpeed Office at every activity
 - Schoolhouse & Online Training
 - “A” & “C” Schools
 - JASMMM, AMO, SEAM, PCO, PXO, etc
 - NKO

AIRSpeed Implementation Schedule



AIRSpeed Implementation Schedule



*Proposed Plan

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- Time to Reliably Replenish (TRR)
 - Does not use averages - 50% rule.
 - Calculates the time to actually replenish utilizing 90%
- Buffer
 - Recommended allowance size for the to-be design based upon customer demand and TRR
- Demand-based Pull System
 - Repair and replenishment processes are activated by customer demand.
 - Ex. Don't induct and repair unless needed by the system to meet customer demand.

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- Four top level metrics that must shape our behavior
 - **Inventory**
 - How much stuff do we have? (people, material contracts, etc)
 - **Reliability**
 - How well are we doing? (quality of product)
 - **Cycle Time**
 - How fast? (driven by people & processes)
 - **Cost Reduction**
 - Complete understanding of the baseline to identify cost reduction impacts and opportunities

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- **NAVRIIP U 101 (1-day class or online)**
 - Contains a general overview of *AIRSpeed*
- **SCTE (1-week class)**
 - Pax River, MD
- **SCTDE (1-week class)**
 - Pax River, MD
- **SCDE (1-week class)**
 - Pax River, MD
- **SCTDM (1-week class)**
 - Pax River, MD
- **Jonah (2-week class)**
 - Pax River, MD
- **Green Belt (1-week class)**
- **Black Belt (2-weeks long separated by 30 days)**

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- The Navy Knowledge Online

<https://wwwa.nko.navy.mil/portal/splash/index.jsp>

- NAVRIIP U 101 – Overview Course including Theory of Constraints, Lean and Six Sigma
- Fleet Business: The Navy Business and Fiscal Practices Course (CNL-FB-1.0)
- Lean Classes
 - Lean Logic (OPER0151)
 - Lean Value (OPER0152)
- Six Sigma
 - Six Sigma Introduction (OPER0131)
 - Six Sigma: Reducing Variation to Improve Quality (OPER0141)
 - Six Sigma: Listening to the Voice of the Customer (OPER0142)
 - Six Sigma DMAIC: Defining the Problem (OPER0143)
 - Six Sigma DMAIC: Measuring the Process (OPER0144)
 - Six Sigma DMAIC: Analyzing the Data (OPER0145)
 - Six Sigma DMAIC: Analyzing the Process (OPER0146)
 - Six Sigma DMAIC: Improving the Process (OPER0147)
 - Six Sigma DMAIC: Controlling the Improved Process (OPER0148)

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- **Defense Acquisition University**

- ***Lean Thinking and Value Stream Mapping (Seminar)***

- Focuses on creating value as determined by the customer emphasizing lean thinking principles and concepts.

- ***Introduction to Lean Enterprise Concepts (CBT or Seminar)***

- Explains lean enterprise concepts and techniques, the key to success for many corporations around the world in the 21st century.

- ***Lean—Six Sigma (CBT or Seminar)***

- Is a continuation of the 'Introduction to Lean Enterprise Concepts' and 'Six Sigma: Concepts and Process' modules.

- ***Six Sigma: Concepts and Process (CBT or Seminar)***

- Introduces the foundations of the Six Sigma quality control methodology created by Motorola to increase the productivity and quality of products and customer service processes

- ***Theory of Constraints (Classroom)***

- Theory of Constraints (TOC) is a philosophy of management improvement and set of techniques used to manage an organization. Mr. Eliyahu Goldratt originated the TOC idea in his book "The Goal" as a way of managing a business to increase profits

- ***Six Sigma (Classroom)***

- Six Sigma is a Quality Control methodology that is the leading Quality Improvement program in Industry. This course discusses what Six Sigma is and how it can be implemented for DoD programs to identify, improve, and measure job processes. Participants will also learn how Six Sigma is being deployed, including the roles of the principle players: "Green Belts", "Black Belts" and "Champions"

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- **Support Fleet Readiness Plan**
 - Provide Ready for Tasking Aircraft
 - Per CFT 1 Entitlements
- **Reduce Total Cost of Naval Aviation**
 - *Reduce Inventory, Operating Expenses, and Manpower*
- **Integrated Maintenance & Supply Support System**
 - *Seamless support to the Fleet*
- **Improve Logistics/Maintenance Response**
 - Decrease Cycle Time
 - Decrease Logistics Footprint
- **Place Ownership and Accountability at the appropriate Levels**

These are the consequences of doing AIRSpeed right.

We have the opportunity to positively impact the business of Naval Aviation through the proper application of *AIRSpeed*.



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- WEBSITE
 - <http://www.cnaf.navy.mil/airspeed>

***Leadership Must Be Visibly Committed
& Engaged***

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Questions???